

EUROPE'S RESPONSIBILITY TO PREPARE: MANAGING CLIMATE SECURITY RISKS IN A CHANGING WORLD

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Cover Photo:
Federica Mogherini, High Representative of the
European Union for Foreign Affairs and Security Policy,
participates to the Foreign Affairs Council, January 2018.
EEAS

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ABSTRACT

The European Union (EU) has recognised the high-probability, high-impact threat climate change poses to international security, but is still formulating a response commensurate to the threat. This report outlines how the EU can meet a Responsibility to Prepare for unprecedented yet foreseeable threats to international peace and security. This involves routinising, institutionalising, elevating and integrating climate security considerations into policymaking processes and the policies and financial instruments of EU institutions, while honing rapid response capabilities and developing contingencies for unintended consequences.

INTRODUCTION

Climate change presents a significant threat to global stability. The threats created by and interwoven with climate change are not distant, either in time or geography. Europe is already confronting terrorist threats connected to the Syrian conflict and the revival of ethnic nationalist political parties responding in part to a surge in out-migration from climate- and conflict-affected areas. In the current international context of new challenges to multilateralism, it is increasingly important that European Union (EU) foreign policy and security actors lead on important issues of global significance, including preparing for climate risks.

Unless managed carefully the risks posed by climate change will grow over this century. In many cases these risks are or will be unprecedented. At the same time, human society has developed an unprecedented foresight capability. We have never before had such wide-ranging and sophisticated abilities to foresee and plan for systemic risks. By deploying these foresight abilities mindfully, and acting on them early, security actors can play an important role in preparing for and mitigating the impacts of climate change on global stability. This is an important opportunity in the sphere of conflict prevention, an area the EU is keen to promote.

Federica Mogherini participates to the High Level Conference on the Sahel, February 2018. EEAS.



Taken together, the unprecedented risks of climate change and the sophisticated foresight abilities we have developed create a ‘responsibility to prepare’ on the part of all international actors. We are only at the beginning of seeing the ways that climate change and security trends will intersect. The Responsibility to Prepare (R2Prepare) framework for managing climate risk can provide a useful tool for guiding and planning responses which are commensurate with this high-probability, high-impact security threat.¹

This brief outlines the R2Prepare framework, which is intended to support practical action to manage the risks of climate change. It argues that the foreign policy and security community must routinise its response to climate change and institutionalise it by embedding it in existing capacities and structures. It must elevate climate risk up the international security agenda and integrate consideration and analysis of climate risk into other relevant fields of external action and (internal) security. It must further develop capacity for rapid response to foreseeable threats, and contingency plans for the unintended consequences of acting.

This is an important moment in Europe for this agenda, as attention to climate security in the EU increases. Climate security is prominently included in the EU's Global Strategy on Foreign and Security Policy,² which states that “Climate change and environmental degradation exacerbate potential conflict” and cites climate as “a threat multiplier that catalyses water and food scarcity, pandemics and displacement”. This Strategy is currently considered the main guidance document of the European External Action Service.

Moreover, in February 2018 EU Foreign Ministers adopted Council Conclusions on Climate Diplomacy³ which addressed the climate security nexus upfront and recognised that “climate change has direct and indirect implications for international security and stability”. As a follow-up, EU High Representative of the Union for Foreign Affairs and Security Policy/ Vice-President of the Commission Federica Mogherini is convening a high-level event in June 2018 to discuss ‘Climate, Peace, and Security: The Time for Action’ which will include a discussion of the ‘Responsibility to Prepare’.

In December of 2017, the United Nations Security Council (UNSC) held an Arria-formula dialogue on climate security chaired by the Italian Mission to the UN that included a presentation of the Responsibility to Prepare framework.⁴ This dialogue was co-sponsored by numerous European countries including The Netherlands, Sweden, the UK, and France.⁵ Newly elected European members of the UNSC Belgium and Germany are also expected to take a proactive stance on furthering attention to climate-related security risks. Across Europe, in both national and international institutions, this issue is being acknowledged and addressed from a variety of angles in strategically important, high-level forums.

This is timely. In resources and in political engagement, the EU has a capability to prepare for climate change that should place it at the front of the global stage on this issue. By better-integrating pre-existing instruments, and tilting toward more robust and preventative risk management, EU institutions and foreign policy and security actors can realise this potential and provide a vital new space for European leadership on the climate issue.

THE SIX PRINCIPLES — MEETING THE RESPONSIBILITY TO PREPARE

The Responsibility to Prepare framework, developed by the Center for Climate and Security in August 2017 and first presented at the aforementioned Arrria-formula meeting of the UN Security Council in December 2017, is comprised of six principles: routinisation, institutionalisation, elevation, integration, rapid response and contingencies for unintended consequences. Many of these principles overlap and interrelate. This report examines each of these in turn and how they can be realised within EU institutions, including a discussion of where current efforts can be further developed.⁶

ROUTINISATION

Effectively addressing climate security risks requires that they are within the scope of the routine activities of the governance bodies responsible for foreign policy and security. Routinising discussions of the complex and multifaceted challenge of climate change within and across diplomatic, development and defence specialisations builds and strengthens literacy about the intersections of climate and security, and grounds the issue in the remits of actors across these spaces. If climate security risk is not routinised and is instead treated as an ‘add-on’, it risks being deprioritised. Routinisation also establishes a regular tempo of discussions, particularly amongst those who may not initially see the issue as central to their job, and can transform engagement and the priority given to the issue.

Triangle Building,
Brussels, Belgium.
MASTERDEIS.



Commitment to addressing climate risks in a more systematic way has been gaining momentum within some EU foreign policy and security bodies. The Foreign Affairs Council resolved in February 2018 to “further mainstream the nexus between climate change and security in policy dialogue, conflict prevention, development and humanitarian action and disaster risk strategies”.⁷ Broadening attention to this issue beyond these initial venues is an important step to operationalising commitment to climate security risk management within the EU. Embedding an appreciation of the full scope of how climate change can act as a threat multiplier on other ‘traditional’ security issues and in new geographies will strengthen the EU’s ability to promote peace and stability in an evolving geophysical and geostrategic environment.

To routinise the climate security nexus into EU foreign and security policy-making, the following actions could be considered:

- Regularly address the climate security nexus in the Political and Security Committee (PSC), in general and with regard to the security situation in specific countries, regions and themes (e.g. migration). The PSC could periodically examine progress on efforts to mitigate the risks climate change poses to international security and stability. This could feed into various EU Council Conclusions, not limited to those on Climate Diplomacy.
- Bolster capacity for understanding and communicating these risks within the European External Action Service and EU delegations, particularly in countries that are most vulnerable to climate impacts and instability. Increase climate diplomacy staffing in the EEAS and designate climate attaches for EU delegations. Strengthen the Green Diplomacy Network’s capacity for proactive leadership on climate security risk management by raising the political priority given to climate security and increasing in-house expertise on the issue.
- Increase EU Military Staff engagement on addressing climate security risks. Integrate climate change considerations into Permanent Structured Cooperation (PESCO) projects, e.g. EUFOR Crisis Response Operation Core and Energy Operational Function, as well as the work of the Military Planning and Conduct Capability.
- Seed the concept and build literacy on climate risk at the member-state level. Make the case for climate change’s broader threat to European security interests, even for countries that may not currently appreciate the relevance of climate threats or which may have minimal expeditionary capabilities or overseas installations that may be affected by climate change. Taking this approach may also establish a common ground on climate risks with more reluctant member-state constituencies. A starting point for this broader strategic conversation could be discussions around energy and military capability development. Incorporate climate security curricula into European defence sector education to ‘normalise’ climate security issues with the next generation of military leadership.

INSTITUTIONALISATION

Institutionalising a Responsibility to Prepare means developing and strengthening infrastructure within government to conduct climate security analysis that can meet decision-makers' information needs in a timely and systematic way. This does not necessarily mean creating new bureaucratic structures, particularly if doing so would be cumbersome. Many instruments can be integrated into existing bodies and tilt their functions in new ways, or act as a binding agent between different agencies, as with the EU's Prevention of conflicts, Rule of law/SSR, Integrated approach, Stabilisation and Mediation division (PRISM) project. Strengthening institutional capabilities to collect and interpret information, using the best analytical tools and information sources available (including Europe's physical science capabilities e.g. from the Galileo and Copernicus satellite programmes) and regularly delivering recommendations for action to decision-makers would increase preparedness for climate security risks, and strengthen capacities for conflict prevention.

Institutionalisation also requires incorporating climate security risk management across EU foreign policy and security institutions and creating a much broader base of climate security literacy. This process could leverage existing concentrations of climate security expertise within EU institutions as part of a widespread effort to seed awareness of the issue. Increasing these capacities can, amongst other benefits, lead to innovations in refining institutional responses to climate security risks.

EU's Integrated Rule of Law Mission for Iraq conducts 'Train the Trainer' course at Contingency Operating Base Basra, March 21, 2011. SGT. JEREMY SPIRES / DVIDS



To institutionalise the climate security nexus into EU institutions, the following could be considered:

- Continue to refine PRISM's ability to perceive climate-related warning signals and trigger appropriate responses. This is a step toward more fully establishing the capabilities and capacities reflected in the 'Climate and Security Crisis Watch Centre' recommendation of the R2Prepare.⁸ The project connects a range of agencies and supports prioritising development and diplomatic interventions for conflict prevention; its establishment is a positive step towards institutionalising a Responsibility to Prepare in the EU. Assess and learn from the impact of PRISM interventions, with a close focus on climate- and environment-related dynamics. Improve monitoring capacity for ongoing extreme weather events and slow-onset events related to climate change that could stress or gradually erode state stability; such events may be more difficult to detect than more dramatic or episodic changes..
- Develop a comprehensive EU strategy on climate change and security. This could better define roles for different institutional actors across development, diplomacy and defence. It could also describe and establish systems for assessing, preventing and responding to climate-related security threats at a pan-European level. This would bring additional clarity to institutionalisation efforts and support the EU Global Strategy's aims on responsible global behaviour and reinforcing security and defence by taking a root causes approach. Fulfilling the mandate of such a strategy, and by extension this element of the EU Global Strategy, will require adequate resources for personnel, training, research and analysis and other activities.
- Expand actionable intelligence on climate and security-related risks, focusing on partner and fragile state stability. In particular, consider risks to the Mediterranean and MENA regions, for example by establishing a Foreign Affairs Council taskforce to conduct climate-related risk assessments and propose management strategies in the region. This may be particularly important given the evolving relationship between the US and Europe, including around military affairs and joint operations.
- Consider suggestions on improving institutionalisation of climate security risk management from informal interagency and multi-institutional processes that have evolved organically. A Brussels-based community of practice⁹ currently meets bi-monthly to discuss efforts to integrate climate into various European security institutions (NATO, OSCE, EEAS and others) and useful suggestions for enhancing institutional structures and relationships can arise from these types of informal conversation. Other relevant initiatives include the Planetary Security Initiative and the Climate and Security Working Group-International, which are coalescing the climate security community of practice and sharing international best-practice on governance structures for managing climate risks.¹⁰



A female Military Police candidate walks back from a break during a training session with European Union instructors at Jazeera Military Camp in Mogadishu, Somalia.
EU CIVIL PROTECTION AND HUMANITARIAN AID OPERATIONS

- Ensure that the EU Conflict Early Warning System (EWS) closely monitors slow-onset events related to climate change that could stress or gradually erode state stability. Such events may be harder to detect than more dramatic or episodic changes. Monitoring capacity will need to be backed by the institutional structures to ensure that the EWS's information reaches the relevant actors (elevation, see below) and precipitates timely and proportionate action (rapid response, see below). Assess whether climate change impacts - both slow-onset events and disasters - are sufficiently integrated into data analysis that informs the EU CEW (EU INFORM). Ensure that the Joint Research Centre, which provides data to both EWS and DG ECHO, is tasked with specific lines of research and horizon scanning.
- Address climate security risk management in the European Council, in the context of increasing coordinating around EU positions in the UNSC.

ELEVATION

In the Responsibility to Prepare framework, making climate security the responsibility of senior personnel within foreign policy and security institutions ensures that the information and insights created by routinisation and institutionalisation are connected with the senior decision-makers who can receive and act on them. Elevating the issue within institutions and ensuring that insights and warnings are delivered to EU bodies by sufficiently senior analysts will be critical for ensuring security preparedness in a climate-changed future, as will contextualising climate risk in the context of other geostrategic priorities.

Climate security issues have been gaining momentum in European institutions,¹¹ and a high-level event convened by HR/VP Mogherini in June 2018 signals that there is interest amongst senior leadership in further defining how the EU will respond. Defining specific landing points for analysis of the effects of climate change on security and the geostrategic landscape will support responsive decision-making on this high-probability, high-impact threat. PRISM reporting directly to the Deputy Secretary General for Common Security and Defence Policy and Crisis Response is a good model. Ongoing attention to the issue from other senior posts at EEAS will further solidify these efforts.

To elevate the climate security nexus within EU institutions the following actions could be considered:

Federica Mogherini participates to the High Level Conference on the Sahel, February 2018. EEAS.



- Regularly include climate as a component of security discussions, focusing not only on immediate crises but also monitoring the broader threat landscape. More briefings could be prepared to inform the HR/VP, EEAS Secretary-General Deputy Secretary Generals, Managing Directors and Directors within EEAS, as well as relevant Council bodies on how climate security risks might affect their domains.
- Senior officials from the European Commission's DG Clima, DG DEVCO and DG NEAR could also be invited to receive the briefings and meetings to discuss them, to increase awareness of the relevance of the climate security nexus to their work (i.e. the relationship with developing and neighbourhood countries both in the context of stability and prosperity, as well as reaching international climate policy objectives).
- Recognise actions on climate security by the European Parliament and promote work undertaken by civil society groups and think tanks on the climate security nexus. Make budget available to support such organisations to convene meetings and contribute analysis to this field.

INTEGRATION

Within the Responsibility to Prepare framework, analysis of climate impacts on foreign policy and security must be integrated with analyses of other critical security priorities such as health security, conflict, international terrorism, nuclear proliferation and maritime security. There is also ample opportunity to connect policy options, such as land restoration and better natural resource management that contribute to reducing climate-related security risks, for instance in the Sahel region, to the EU's migration agenda (e.g. EU trust funds for the Sahel and Syria). Because these issues interrelate and are likely to interact in unexpected ways in the wider evolving geostrategic environment, only an approach that considers them in the round can be sufficiently flexible and sophisticated to provide useful analysis.

The conflict dimensions of climate change are already more integrated into EU institutions than many other potential security issues, but integration is somewhat piecemeal. EU security institutions have addressed maritime security issues around the changing Arctic, and human trafficking in the Mediterranean. But there are gaps in broader integration of climate security risk analysis.

For example, the climate change, nuclear risks and security nexus is only beginning to be examined, although some countries with underlying fragilities and climate hazard exposure have included nuclear energy in their UNFCCC Nationally Determined Contributions, and nuclear weapons states including India and Pakistan are experiencing intense climate impacts.¹² The EU could contribute to taking this issue to a next, more mature level of risk reduction.

Analysis that can guide comprehensive climate security assessments must be well-integrated across different disciplines and risk areas. By integrating climate across the range of security challenges the EU faces, within a Responsibility to Prepare framework, the EU can position itself in a preventive rather than reactive posture for addressing the full scope of risks climate change presents. The comprehensive or joined-up approach is one of the most prominent agendas in the EU's foreign and security policy, and the climate security nexus fits extremely well into this agenda.

To integrate or mainstream the climate security nexus into a wider range of EU policies, the following more specific action points could be considered:

- As a starting point, hold consultations within the Commission and EEAS, engaging researchers to examine how climate trends may interact with dimensions of terrorism, health, nuclear, maritime and other European security challenges. Incorporate measures to address these considerations into a broader EU climate security strategy. Embed climate and security analysts across issue silos within member-state governments and across EU institutions, and create interagency structures to facilitate such integration.
- Link insights on the climate security nexus to ongoing debates on how to address the root causes of migration, and conflict prevention, development, neighbourhood and accession policies. The ongoing negotiations on a new EU Multiannual Financial Framework for the 2021-2027 period provides a unique opportunity to integrate climate security thinking into the EU's financial instruments. A small project has been funded out of the Instrument for Stability and Peace, but more funds could be targeted to contribute to reducing climate security risks. The European Peace Facility¹³ if approved, should ensure climate-sensitivity analysis is incorporated into operations, particularly those undertaken in support to partner countries.

RAPID RESPONSE

The Responsibility to Prepare framework calls for improving conflict early warning systems, but, these systems are only as effective at prevention as the responses they generate. Scaled climate security warning systems that identify long, medium and short-term risks and include clear 'triggers' for emergency action will help ensure that foreseeable events are acted upon with appropriate levels of urgency. This is particularly important for anticipating low probability/high impact risks and creating governance capacity to prepare for 'unknown unknowns' or 'black swan' events that are difficult or impossible to accurately predict.



The EU-funded, WHO-run Safe Hospitals project ensures that vital health care can be delivered in the aftermath of earthquakes, tsunamis or floods which regularly affect the Dominican Republic.
EU CIVIL PROTECTION AND HUMANITARIAN AID OPERATIONS

The EU's Conflict Early Warning System does have mechanisms for taking account of climate-related factors. However, use of this system is still being integrated into other conflict assessment, conflict prevention and crisis management entities in the EU.¹⁴ Adequate resourcing of PRISM's conflict prevention and crisis response mechanisms could strengthen the EU's Crisis Response System capacities to prevent situations of climate-related fragility escalating into more complex crises.

To step up actionable intelligence for climate security risks the following actions could be discussed:

- Improve use of the Conflict Early Warning System and PRISM's outputs for crisis response, so climate signals are not missed in emerging crises. Ensure the EEAS Crisis Response System's comprehensive approach and action take full account of climate and environmental factors. Continue processes to refine integration of PRISM stabilisation actions and CSDP missions for crisis response. Consider adapting the Instrument contributing to Stability and Peace (IcSP) to include climate security in both situations of crisis and stable situations.



General Lecointre, Commander of the European Union Training Mission (EUTM), meets the Malian soldiers at the EUTM of Koulikoro. April 2013. J.FARO / ARMÉE DE TERRE/EMA

CONTINGENCIES FOR UNINTENDED CONSEQUENCES

Even with careful and mindful action, solutions to manage climate risk may bring their own unintended consequences. The final principle of the Responsibility to Prepare framework suggests that such unintended outcomes should be anticipated through scenario mapping, with contingencies developed to address them.

For example, a lack of climate sensitivity in adaptation, development, humanitarian relief and peacebuilding interventions can have adverse security impacts in fragile contexts. Intensive mitigation measures, or ‘geoengineering’ efforts, could result in new and unpredictable disruptions to climate, water, food and energy systems, particularly in the absence of international norms to regulate their use.

Facilitating or institutionalising cross-sectoral/interagency coordination to hedge against these unintended consequences, as suggested in the ‘integration’ section above, would be one way to mitigate the risk of ‘unknown unknowns’. Other possible actions include:

- Engage with projects working to anticipate and address unintended consequences, such as the Carnegie Climate Geoengineering Governance Initiative¹⁵ and the Global Commission on the Geopolitics of Energy Transformation,¹⁶ both of these deal with mitigation.
- Strengthen the research-policy interface to examine risks around unintended security consequences of climate adaptation, development, disaster response and humanitarian intervention.¹⁷ A climate security mission on this subject being part of a bigger mission on dealing with climate change impacts might be considered in the context of the proposal for a new EU Research Programme: Horizon Europe (2020-2027).

CONCLUSION

Ensuring that critical, non-traditional risks to international security like climate change are anticipated, analysed and addressed systematically, robustly and rapidly by intergovernmental security institutions such as the EU requires an adaptation of existing institutional structures. ‘Climate-proofing’ security institutions means routinising, integrating, institutionalising and elevating attention to climate and security issues, establishing rapid response mechanisms and developing contingencies for the unintended consequences of acting.

This Responsibility to Prepare framework provides a way for critical non-traditional challenges like climate change to be appropriately managed as global security risks rather than niche concerns. A practical fulfilment of the goals and principles articulated in this framework would increase the likelihood of more stable governance in the face of rapid but foreseeable change.

The EU’s security institutions are increasingly recognising that climate change can act as a driver of insecurity and instability, and the scale to which it might exacerbate threats to Europe’s security interests. Meeting a Responsibility to Prepare would bring tangible benefits, putting the EU on a stronger preventative footing to address high-probability, high-impact security threats associated with climate change, and demonstrating leadership on an important aspect of the climate issue. Prioritising climate-related threats within the range of other security concerns Europe faces may be challenging, but appreciating how climate change intersects with other challenges that threaten global stability can reemphasise the ways this action is in the EU’s interests and worth the investment.

Caitlin Werrell, Co-Founder and President of the Center for Climate and Security, debuts the Responsibility to Prepare framework at the UN Security Council - Dec 15, 2017



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ENDNOTES

- 1 Werrell, C et al, “A Responsibility to Prepare: Governing in an Age of Unprecedented Risk and Unprecedented Foresight,” The Center for Climate and Security, 7 August, 2017. https://climateandsecurity.files.wordpress.com/2017/12/a-responsibility-to-prepare_governing-in-an-age-of-unprecedented-risk-and-unprecedented-foresight_briefer-38.pdf.
- 2 European External Action Service, “Shared Vision, Common Action: A Stronger Europe - A Global Strategy for the European Union’s Foreign and Security Policy,” 2016. https://europa.eu/globalstrategy/sites/globalstrategy/files/eugs_review_web.pdf.
- 3 Council of the European Union, Council Conclusions on Climate Diplomacy, 26 February 2018, <http://www.consilium.europa.eu//media/32953/st06125-en18.pdf>.
- 4 Video and Summary UN Security Council Meeting on Climate and Security, Center for Climate and Security. December 19, 2017. <https://climateandsecurity.org/2017/12/19/video-and-summary-un-security-council-meeting-on-climate-and-security/>.
- 5 Other nations sponsoring the Arria-formula Dialogue included Morocco, Peru, Japan, and the Maldives.
- 6 Werrell et al, *Op. cit.*
- 7 In doing so, it cited some of the main climate security initiatives currently underway, including the G7 working group on climate fragility (a process following from the independent report commissioned by the G7 Foreign Ministers, Rüttinger, L., Stang, G., Smith, D., Tänzler, J., Vivekananda, J. et al., “A New Climate for Peace: Taking Action on Climate and Fragility Risks”, Berlin/London/Washington/Paris: adelphi 2015, International Alert, Wilson Center, EUISS, <https://www.newclimateforpeace.org/>); the Planetary Security Initiative and Hague Declaration (Planetary Security Initiative, Hague Declaration on Planetary Security, <https://www.planetarysecurityinitiative.org/signees>); as well as the establishment of an institutional home for climate security at the UN, specifically supporting climate change being routinized in the Security Council as a ‘recurrent item within deliberations for UNSC resolutions and statements’ (See Camilla Born, ‘A Resolution for A Peaceful Climate: Opportunities for the UN Security Council’, SIPRI 2017, <https://www.sipri.org/sites/default/files/Resolution-for-peaceful-climate.pdf>).
The Center for Climate and Security presented the Responsibility to Prepare framework at a UN Security Council Arria-formula dialogue in December 2017. EU Member States (chaired by Italy) hosted that dialogue. See <https://climateandsecurity.org/responsibilitytoprepare/>.
- 8 Werrell et al, *Op. cit.*, p. 4.
- 9 Brussels Dialogue on Climate Diplomacy, <https://www.brusselsdialogue.net/>.
- 10 Planetary Security Initiative <https://www.planetarysecurityinitiative.org>, The Climate and Security Working Group-International <https://climateandsecurity.org/policy/>.
- 11 See Hannes Sonnsjö & Niklas Bremberg, ‘Climate Change in an EU Security Context, The Role of the European External Action Service’, 2016; Niklas Bremberg, ‘European regional organizations and climate-related security risks: EU, OSCE and NATO’, SIPRI 2018,
- 12 The Center for Climate and Security, Climate-Nuclear-Security Program, <https://climateandsecurity.org/climatenuclearsecurity/>.
- 13 ‘European Peace Facility - An EU off-budget fund to build peace and strengthen international security’, https://eeas.europa.eu/headquarters/headquarters-homepage/46285/european-peace-facility-factsheet_en.
- 14 Gerald Stang and Taylor Dimsdale, ‘The EU and Climate Security’, Planetary Security Initiative, January 2017, https://www.planetarysecurityinitiative.org/sites/default/files/2017-03/PB_The_P20EU_Climate_Security.pdf.pagespeed.ce.C75k3Wl-1K.pdf.
- 15 Carnegie Climate Geoengineering Governance Initiative, Carnegie Council for Ethics in International Affairs, 2018, <https://www.c2g2.net/>.
- 16 Global Commission on the Geopolitics of Energy Transformation, International Renewable Energy Association, 2018, <http://www.geopoliticsofrenewables.org/>.
- 17 See for example Chitra Nagarajan, Benjamin Pohl, Lukas Rüttinger, Florence Sylvestre, Janani Vivekananda, Martin Wall, Susanne Wolfmaier, ‘Climate-Fragility Profile: Lake Chad Basin’, adelphi 2018, https://www.adelphi.de/en/system/files/mediathek/bilder/Lake%20Chad%20Climate-Fragility%20Profile%20-%20adelphi_0.pdf.



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